

## AMENDMENTS TO THE CLAIMS

This following listing of claims replaces all previous versions of the claims in this application.

### **Listing of Claims**

1. **(Currently amended)** A reaction mixture for primer-based amplification of a target nucleic acid sequence, the reaction mixture comprising
  - each conventional nucleotide dATP, dCTP, dGTP, and dTTP in combination with dUTP as a replacement for a portion of the dTTP, wherein said dUTP replaces from about 10 to about 50% of said dTTP in said reaction mixture; and
    - at least one primer, wherein said primer has at least one uracil base incorporated therein;
      - wherein the inclusion of dUTP reduces the formation of primer aggregates during the amplification reaction in comparison with an amplification reaction employing only conventional nucleotides.
2. **(Currently amended)** The reaction mixture according to claim 1, wherein the dUTP replaces from about 10 to about 7530% of the dTTP in said reaction mixture.
3. **(Currently amended)** The reaction mixture according to claim 1, wherein the dUTP replaces from about 420 to about 540% of the dTTP in said reaction mixture.
4. **(Currently amended)** The reaction mixture according to claim 1, further comprising at least one additional unconventional nucleotide, wherein the combined concentration of said dUTP and said at least one unconventional nucleotide does not exceed 75% of any one conventional nucleotide in said reaction mixture.
5. **(Currently amended)** The reaction mixture according to claim 1, wherein said reaction mixture comprises a primer pair and wherein each member of the primer pair has at least one or more uracil bases incorporated therein.

6. (Original) The reaction mixture according to claim 5, wherein each member of the primer pair has all of its thymidine bases replaced with uracil bases.

7. (Original) The reaction mixture according to claim 1, wherein the dUTP does not exceed a final amplification reaction concentration of about 300  $\mu$ M.

8. (Original) The reaction mixture according to claim 1, wherein the dUTP does not exceed a final amplification reaction concentration of about 100  $\mu$ M.

9. (Original) The reaction mixture according to claim 1, further comprising at least one polymerase enzyme.

10. (Original) The reaction mixture according to claim 1, further comprising a buffer system.

11. (Currently amended) A method for reducing primer aggregation during amplification of a target nucleic acid, the method comprising: combining a target nucleic acid with a reaction mixture according to any one of claims 1 to 10; and amplifying the target nucleic acid such that the level of primer aggregate formed during the amplification reaction is reduced as compared to amplifying the target nucleic acid using a dNTP mix having only conventional nucleotides, wherein said nucleic acid is DNA.

12. (Currently amended) A method for amplifying a target nucleic acid sequence, the method comprising: combining a sample with a reaction mixture according to any one of claims 1 to 10; and amplifying the target nucleic acid in said sample such that the level of primer aggregate formed during the amplification reaction is reduced as compared to amplifying the target nucleic acid using a dNTP

mix having only conventional nucleotides, wherein said method lacks an enzyme degradation step employing UNG and wherein said nucleic acid is DNA.

13. **(Currently amended)** The method according to claim 11-~~or~~12, wherein the reaction mixture further comprises sorbitol or mannitol.

14. **(Original)** The method according to claim 13, wherein the target nucleic acid has secondary structure.

15-18. **(Canceled)**

19. **(New)** The method according to claim 13, wherein the reaction mixture comprises 100 to 500 mM sorbitol or 100 to 300 mM mannitol.

20. **(New)** The reaction mixture according to claim 1, wherein the reaction mixture further comprises sorbitol or mannitol.

21. **(New)** The reaction mixture according to claim 20, wherein the reaction mixture comprises 100 to 500 mM sorbitol or 100 to 300 mM mannitol.

22. **(New)** The reaction mixture according to claim 12, wherein the reaction mixture further comprises sorbitol or mannitol.

23. **(New)** The reaction mixture according to claim 22, wherein the reaction mixture comprises 100 to 500 mM sorbitol or 100 to 300 mM mannitol.